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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,572	09/21/2001	David N. Pether	00-338 1496.00165	5725

24319 7590 11/18/2004

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EXAMINER	
TRAN, TRANG U	

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/960,572	PETHER ET AL.	
	Examiner	Art Unit	
	Trang U. Tran	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-4, 6-14 and 16-20 is/are rejected.

7)☒ Claim(s) 5 and 15 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 12/03/2001.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4, 6-14 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stenzel at al. (US Patent No. 5,737,032) in view of Thadani et al. (US Patent No. 6,201,530 B1).

In considering claim 1, Stenzel et al discloses all the claimed subject matter, note 1) the claimed a first circuit configured to present a first portion an output data stream in response to a first portion of an input data stream is met by the data at VDIN that does not represent video which is delayed by a time equal to the processing delay of video data through the apparatus (Figs. 1 and 2, col. 5, lines 14-40), and 2) the claimed a second circuit configured to present second portion of said output data stream in response a second portion of said input data stream, wherein said apparatus is configured to perform gamma correction on said input data stream to generate data said output stream in response to one or more control signals is met by the serial digital converter or corrector (the interpolate Cb, Cr, the convert YcbCr to RGB, the look-up table memory w/FLAGS do gamma correction, the convert RGB to YcbCr, and the clip) in response to the control signals of microcontroller 40 (Figs. 1 and 2, col. 5, line 41 to col. 10, line 63).

However, Stenzel et al explicitly do not disclose the claimed said apparatus is configured to perform color correction on said input data stream.

Thadani et al teach that Fig. 1A is a flow chart illustrating a conventional method for converting an image in a first data format to a second data format. After white balance correction via step 20, color correction is performed, via step 40, the color correction changes the white balanced RGB image so that its color are more consistent with standard colors...next, gamma correction is perform on the image, via step 60, to correct any nonlinearity (Fig. 1A, col. 1, lines 24-60).

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the color correction perform with the gamma correction as taught by Thadani et al into Stenzel et al's system in order to increase the quality of the video signal by performing the color correction.

In considering claim 2, the combination of Stenzel et al and Thadani et al disclose all the limitations of the instant invention as discussed in claim 1 above, except for providing the claimed wherein said apparatus comprises a block move engine (BME). The capability of using a block move engine (BME) in old and well known in the art. Therefore, the Official Notice is taken. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the old and well known of using a block move engine (BME) into the combination of Stenzel et al and Thadani et al's system in order to facilitate the process of the video signal.

In considering claim 3, the claimed wherein said first circuit comprises a delay circuit is met by the delay circuit (Figs. 1 and 2, col. 5, lines 14-40 of Stenzel et al).

In considering claim 4, the claimed wherein said second circuit comprises a correction circuit is met by the look-up table memory w/FLAGS do gamma correction in response to the control signals of microcontroller 40 (Figs. 1 and 2, col. 5, line 41 to col. 10, line 63 of Stenzel et al).

In considering claim 6, the claimed wherein said control signals comprise: one or more coefficient signals is met by the coefficient signals from the controller 40 (Figs. 1 and 2, col. 8, line 43 to col. 10, line 63 of Stenzel et al).

In considering claim 7, the claimed wherein said comprise: one or more offset signals is met by the offsets value RGB signal from the controller 40 (Figs. 1 and 2, col. 8, line 43 to col. 10, line 63 of Stenzel et al).

In considering claim 8, the claimed wherein said control signal comprises: one or more enable signals is met by the selected signal by latching an enable signal of the timing circuit 50 (Fig. 4, col. 11, lines 37 to col. 13, line 11 of Stenzel et al).

In considering claim 9, Stenzel et al disclose the claimed wherein said input data stream comprises video data is met by the digital video input data 32 (Fig. 1, col. 5, lines 14-40). However, the combination of Stenzel et al and Thadani et al explicitly do not disclose the claimed wherein said input data stream comprises graphics data. The capability of using graphics data is old and well known in the art. Therefore, the Official Notice is taken. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the old and well known of using graphics data into the combination of Stenzel et al and Thadani et al's system in order to increase the flexibility of the system by allowing different input signals to be processed.

In considering claim 10, the combination of Stenzel et al and Thadani et al disclose all the limitations of the instant invention as discussed in claims 1 and 2 above, except for providing the claimed wherein said BME comprises a block modify and move engine (BMME). The capability of using BME comprises a block modify and move engine (BMME)in old and well known in the art. Therefore, the Official Notice is taken. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the old and well known of using BME comprises a block modify and move engine (BMME) into the combination of Stenzel et al and Thadani et al's system in order to facilitate the process of the video signal.

In considering claim 11, the combination of Stenzel et al and Thadani et al disclose all the limitations of the instant invention as discussed in claims 1 and 2 above, except for providing the claimed wherein said BME is further configured to perform color and gamma conversion. The capability of using a block move engine (BME) is configured to perform color and gamma conversion in old and well known in the art. Therefore, the Official Notice is taken. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the old and well known of using a block move engine (BME) is configured to perform color and gamma conversion into the combination of Stenzel et al and Thadani et al's system in order to facilitate the process of the video signal.

Claim 12 is rejected for the same reason as discussed in claim 1.

Claim 13 is rejected for the same reason as discussed in claim 1.

Claim 14 is rejected for the same reason as discussed in claims 3 and 4.

Claims 16-18 are rejected for the same reason as discussed in claims 6-8, respectively.

Claim 19 is rejected for the same reason as discussed in claim 9.

Claim 20 is rejected for the same reason as discussed in claim 10.

Allowable Subject Matter

3. Claims 5 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Eskin (US Patent No. 6,727,959 B2) discloses system of and method for gamma correction of real-time video.

Kim (US Patent No. 5,949,496) discloses color correction device for correcting color distortion and gamma characteristic.

Takamori (US Patent No. 5,991,056) disclose image processing apparatus for performing tonal and color matrix transformations.

Ryoo et al. (US Patent No. 5,552,904) disclose color correction method and apparatus using adaptive region separation.

Seki et al. (US Patent No. 5,311,297) disclose HDTV to conventional TV signal converting apparatus with non-linear level correction.

Evans et al. (US Patent No. 4,564,915) disclose YIQ computer graphics system.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang U. Tran whose telephone number is (703) 305-0090. The examiner can normally be reached on 8:00 AM - 5:30 PM, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TT TT
November 8, 2004

JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600